

CLAIMS:

1. A switching power supply unit comprising a transformer, a switching circuit disposed on a primary side of the transformer, a self-driven type
5 synchronous rectifier circuit disposed on a secondary side of the transformer and including at least one rectifier switch, and a self-oscillation stop circuit disposed on the secondary side of the transformer and adapted to turn off the at least one rectifier switch when a voltage between opposite ends of the at least one rectifier switch exceeds a
10 predetermined value.
2. A switching power supply unit in accordance with Claim 1, which further comprise a Zener diode connected in parallel with the at least one rectifier switch.
15
3. A switching power supply unit in accordance with Claim 2, wherein a Zener voltage of the Zener diode is determined so as to be higher than a voltage applied between the opposite ends of the at least one rectifier switch during ordinary operation.
20
4. A switching power supply unit in accordance with Claim 3, wherein the Zener voltage of the Zener diode is determined so as to be lower than a withstand voltage of the at least one rectifier switch.
- 25 5. A switching power supply unit in accordance with Claim 1, wherein the self-oscillation stop circuit is constituted so as to turn off the at least one rectifier switch by substantially short-circuiting a gate and a source of

the at least one rectifier switch.

6. A switching power supply unit in accordance with Claim 2, wherein
the self-oscillation stop circuit is constituted so as to turn off the at least
5 one rectifier switch by substantially short-circuiting a gate and a source of
the at least one rectifier switch.

7. A switching power supply unit in accordance with Claim 3, wherein
the self-oscillation stop circuit is constituted so as to turn off the at least
10 one rectifier switch by substantially short-circuiting a gate and a source of
the at least one rectifier switch.

8. A switching power supply unit in accordance with Claim 4, wherein
the self-oscillation stop circuit is constituted so as to turn off the at least
15 one rectifier switch by substantially short-circuiting a gate and a source of
the at least one rectifier switch.